

**To:** bpeller@usgs.gov[]  
**Cc:** mkshouse@usgs.gov[]  
**Bcc:** []  
**From:** CN=Erin Foresman/OU=R9/O=USEPA/C=US  
**Sent:** Fri 10/28/2011 7:30:03 PM  
**Subject:** Re: Fw: BDCP - toxins appendix  
[Foresman.Erin@epa.gov](mailto:Foresman.Erin@epa.gov)  
[mkshouse@usgs.gov](mailto:mkshouse@usgs.gov)

Hi Brian,  
Thanks so much for your reviewing the ammonia/um section and providing input. I'll incorporate it into my comments.  
Thank you!  
Erin

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<http://www.epa.gov/region9/water/watershed/sfbay-delta/index.html>

-----Brian Pellerin <bpeller@usgs.gov> wrote: -----

To: Erin Foresman/R9/USEPA/US@EPA  
From: Brian Pellerin <bpeller@usgs.gov>  
Date: 10/28/2011 11:58AM  
Cc: Michelle K Shouse <mkshouse@usgs.gov>  
Subject: Re: Fw: BDCP - toxins appendix

Hi Erin. I just gave a quick read to the ammonia/um section. The only part that I think it misses is the fact that nitrogen is not conservative, and there does not appear to be any consideration of how changes in the timing and/or amount of flow affects nutrient uptake (inorganic N to organic N), nitrification (NHx to NOx) and denitrification (NOx to N gas). Not sure how big of a consideration it is, but treating ammonia/um as a conservative species that is only influenced by mixing may not be totally accurate (although it may be a more reasonable assumption in large rivers). On a more technical note, I'm always a bit skeptical of drawing major conclusions from monthly water quality data, and future efforts to monitoring nutrients in situ could improve our understanding of the patterns and trends.

Brian

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From: Michelle K Shouse/DO/USGS/DOI  
To: Jacob A Fleck/WRD/USGS/DOI@USGS, Kathryn M Kuivila/WRD/USGS/DOI@USGS, Brian Bergamaschi/WRD/USGS/DOI@USGS, Brian Pellerin/WRD/USGS/DOI@USGS  
Cc: Foresman.Erin@epamail.epa.gov  
Date: 10/26/2011 01:55 PM  
Subject: Fw: BDCP - toxins appendix

Hi everyone,

I know that Roger has communicated with you about reviewing the BDCP Effects Analysis - Toxin Appendix at the request of EPA. Attached is said document. Erin Foresman is preparing EPA's response and would very much appreciate our thoughts. Please communicate directly with Erin and please cc me on your message (if via e-mail). The original message we received is included below. You can reach Erin at (916) 557 5253 or Foresman.Erin@epa.gov

Please send your thoughts to Erin by Friday, Oct. 28th, at the latest and let me know if you have any questions.

Thanks!  
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-----Forwarded by Michelle K Shouse/DO/USGS/DOI on 10/26/2011 01:48PM -----

To: Eric Reichard <egreich@usgs.gov>, rfujii@usgs.gov, "Shouse, Michelle K" <mkshouse@usgs.gov>  
From: Schwinn.Karen@epamail.epa.gov  
Date: 10/21/2011 03:48PM  
cc: Foresman.Erin@epamail.epa.gov  
Subject: Fw: BDCP - toxins appendix

Eric, Roger, and Michelle -

We just got this document (attached) from DOI. Its an appendix to the BDCP Effects Analysis prepared by the new consultant, ICF. This one is supposed to evaluate the contaminant effects on T&E species from the proposed BDCP actions (considering only the most extreme conveyance option, plus some range of habitat restoration). The constituents discussed in the document include selenium, mercury, ammonia, copper and pesticides.

From my non-scientific read, it seems pretty darn superficial - it basically says there will be less dilution but likely won't matter to fish. We are writing comments, pointing out some obvious things and questions we need addressed in the NEPA and/or 404 process. What's more difficult is advising them on how they might approach a deeper analysis. Do your folks have any time to look at this? Federico wants comments by noon on November 1 - though after that there may be an opportunity to interact with ICF directly. I checked with David Nawi on USGS

involvement and he welcomes it, though I guess hasn't sought it in this particular case, given your resource constraints.

Erin Foresman, on our staff (located in Sacramento) is working on our comments. Feel free to contact have your folks contact her directly if they are able to assist. Thanks! - Karen

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[attachment "App D\_Toxins\_101411.pdf" deleted by Brian Pellerin/WRD/USGS/DOI]